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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,016	04/27/2001	Jacques M. Dulin	24347-051US	1461

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EXAMINER

LOUIS JACQUES, JACQUES H

ART UNIT PAPER NUMBER

3661

DATE MAILED: 02/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/845,016

Applicant(s)

DULIN ET AL.

Examiner

Jacques H. Louis-Jacques

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3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2002 and 29 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,7,11-14,17,18,21-24,28 and 30-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,11-14,17,18,21-24,28 and 30-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-7, 11-14, 17-18, 21-24, 28, 30-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al [6,263,272] in view of Seip et al [6,314,380].

Liu et al [6,263,272] discloses a vehicle having a thermal protection arrangement for toddlers (vehicular passengers) and pets (animals), wherein the danger of heat prostration is suffocation is reduced. According to Liu et al, the temperature of the interior or exterior of the vehicle is monitored and a warning or alert signal is generated based on the monitored temperature. The system of Liu et al maintains a "comfortable" temperature range for the interior of the vehicle over the time period the vehicle is parked and left unattended. There is also provided a means of communications to alert the vehicle operator and others in case of exceedingly high or low temperatures in the vehicle interior that might be life-threatening to those toddlers, pets or other incapacitated living beings who are left unattended in the vehicle. See abstract. According further to Liu et al, a vehicle condition, e.g., ignition state (operator removing the ignition key), vehicle stopped, door open/closed, is sensed and used in issuing the alarm or warning signal along with monitored temperature. See also the abstract and columns 3-4. Still according

to Liu et al, the communications system may include a vehicle alarm, a headlight flashing system and a vehicle emergency horn system. These devices may be used singly or in combination to alert the vehicle operator and/or others near by about the dangerous condition that exists for those who are left unattended in the vehicle. The communications system further includes a typical pager device for activating in a well-known manner a beeper that is carried by the vehicle operator. There is also provided a Global Positioning System (GPS) location system, which can be used as a part of the communications system for providing location information of the vehicle to rescuers (e.g., public emergency services, for example, police and paramedics). Still another aspect of the Liu et al system is to provide a voice announcement, or sound or illuminated warning. In addition, Liu et al discloses a living being sensor for detecting an occupancy state of the vehicle. Such sensor may be implemented with a motion detector based on ultrasound. See column 7. Referring back to columns 3 and 4, Liu et al discloses automatically adjusting or activating, in response to the monitored temperature, vehicle's power window and power sunroof positions. While in column 6 Liu et al discloses that numerous temperature sensing circuits available can be used, Liu et al does not particularly disclose that the temperature is extracted from an ultrasound unit. Seip et al, on the other hand, discloses an ultrasound transducer temperature compensation methods, apparatus and programs for compensating for the effect of temperature on the sensitivity of electrostatic ultrasound transducers, particularly as used in an automotive occupancy sensing (AOS) system for sensing the nature or type of occupant and the location of the occupant with respect to the vehicle interior (abstract). The ultrasound unit of Seip can be

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used for extracting both the occupancy state and the temperature of the vehicle. See also column 3. Based on the output of the ultrasound unit, an airbag deployment system (50, ADS) can be activated. Thus, it would have been obvious to one skilled in the art at the time of the invention to be motivated to modify the vehicle having a thermal protection arrangement for toddlers (vehicular passengers) and pets (animals) of Liu et al by incorporating the temperature and occupancy from the ultrasound unit of Seip et al because such modification, as suggested by Seip et al, would optimize the occupancy classification algorithm performance while providing a reliable temperature extraction.

### ***Response to Amendment***

3. The amendments along with arguments filed therewith have been entered and carefully considered by the Examiner.

Applicant argued that the prior art does not teach using an ultrasound unit for extracting both temperature and occupancy status. The examiner agrees. However, this combination is taught by Seip et al. Applicant also recognized and admitted that Seip et al discloses the combination. See response at pages 12-13. Accordingly, a new ground of rejection has been applied against the pending claims.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques H. Louis-Jacques whose telephone number is (703) 305-9757. The examiner can normally be reached on M-Th, 7:30 AM - 4:00 PM (Eastern Time).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1111.

Jacques H. Louis-Jacques  
Primary Examiner  
Art Unit 3661

/jlj  
January 29, 2003

*Jacques H. Louis-Jacques*  
JACQUES H. LOUIS-JACQUES  
PRIMARY EXAMINER